

Notice of Allowability

Application No.

10/712,990

Examiner

Nathan W. Schlientz

Applicant(s)

RAMIREZ ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants Remarks filed 20 July 2007.
2. ☒ The allowed claim(s) is/are 1-4, 6-33 and 36-42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 27 April 2007
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

NOTICE OF ALLOWANCE

Claims 1-4, 6-33 and 36-42 are allowed.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 27 April 2007 was filed after the mailing date of the non-final office action on 27 March 2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Double Patenting

The provisional obviousness-type double patenting rejection of claims 1-22, 27 and 30-33 as being unpatentable over claims 1, 3-6, 8-11, 15, 16, 18 and 19 of copending Application No. 11/128,223 is hereby **withdrawn** because the instant application is the earlier of the two copending applications and is in condition for allowance. See MPEP 804(I)(B)(1).

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with attorney Christopher W. Brody on 19 December 2007 and 21 December 2007.

The application has been amended as follows:

- In claim 1, delete "mycobacterial and sporicidal" from the first line, and insert after the word "solution" and before the word "having" on the second line --, effective in killing mycobacteria and spores,--.
- In claim 4, insert --further-- after "claim 1".
- In claim 6, insert --further-- after "claim 1".
- In claim 11, insert --further-- after "claim 1".
- In claim 14, insert --further-- after "claim 1".
- In claim 18, replace "17 comprising at least one of" with --14, wherein said at least one anionic surfactant is chosen from--.
- In claim 21, insert --further-- after "claim 1".
- In claim 23, insert --further-- after "claim 1".
- In claim 28, insert --further-- after "claim 1".
- In claim 30, insert --further-- after "claim 1".
- In claim 38, insert --further-- after "claim 1".
- In claim 39, insert --further-- after "claim 1".
- In claim 40, insert --further-- after "claim 1".
- In claim 41, insert --further-- after "claim 1".
- Cancel claims 34 and 35.

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- In claim 33, replace “combined amount of cyclic carboxylic acid and aromatic alcohol is” with --2-furan carboxylic acid is present in a concentration--.
- In claim 36, replace “cleaning” with --disinfecting--.
- Also in claim 36, insert --to disinfect the equipment-- after the word “Celsius” on the last line.
- Also in claim 36, delete the colon on the first line after the words “comprising the steps of”.
- In claim 37, replace “The use of a solution according to claim 1 for inactivating fungi and mycobacteria” with –A method of disinfecting a surface comprising the step of applying a solution according to claim 1 to the surface to disinfect the surface--.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the instant claims are drawn to an aqueous disinfecting mycobacterial *and sporicidal* solution comprising H₂O₂ and 2-furancarboxylic acid. The prior art recognizes a composition comprising 2-furancarboxylic acid, or furan-2-carboxylic acid, and benzalkonium chloride for disinfecting mycobacteria, and further teaches that H₂O₂ could suitably be substituted for benzalkonium chloride. However, Applicants provided evidence in an affidavit, filed 20 July 2007, showing that the composition comprising 2-furancarboxylic

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acid and benzalkonium chloride is not an effective sporicidal composition. Also,

Applicants instant specification states in Example III,

"It is seen from [Table III] that the addition of a small amount of 2-furoic acid (a.k.a. 2-furancarboxylic acid) to a 0.75% active hydrogen peroxide solution (Composition II) will increase the efficacy of the solution by more than 1 order of magnitude in relation to 0.75% hydrogen peroxide alone (Composition B), and by more than 2 orders of magnitude with respect to a 2-furoic acid based solution (Composition C)."

Therefore, the instant specification shows a synergistic sporicidal relationship between 2-furancarboxylic acid and H₂O₂ in the treatment of *Bacillus subtilis* (Example III). Thus, the combination of 2-furancarboxylic acid and benzalkonium chloride is not obvious as a sporicidal composition.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

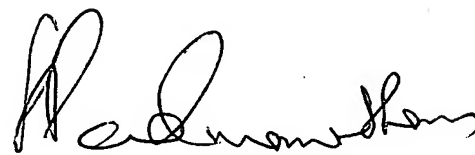
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Schlientz whose telephone number is 571-272-9924. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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